

PROCESS FOR OXYGENATION OF COMPONENTS FOR REFINERY
BLENDING OF TRANSPORTATION FUELS

ABSTRACT OF THE INVENTION

5 Economical processes are disclosed for production of components for refinery blending of transportation fuels which are liquid at ambient conditions by selective oxygenation of refinery feedstocks comprising a mixture of organic compounds. The organic compounds are oxygenated in a liquid reaction medium with an

10 oxidizing agent and heterogeneous oxygenation catalyst system which exhibits a capability to enhance the incorporation of oxygen into a mixture of liquid organic compounds to form a mixture comprising hydrocarbons, oxygenated organic compounds, water of reaction, and acidic co-products. The mixture is separated to

15 recover at least a first organic liquid of low density and at least a portions of the catalyst metal, water of reaction and acidic co-products. Advantageously, the organic liquid is washed with an aqueous solution of sodium bicarbonate solution, or other soluble chemical base capable to neutralize and/or remove acidic co-

20 products of oxidation, and recover oxygenated product.